MCF 3M Opener

Simplify

i) $\frac{3^2 \cdot (2^3)^2}{3(2)^2}$ ii) $2^3 \div 3^{-2}$

iii) $9^{\frac{1}{2}}$ $16^{\frac{3}{4}}$

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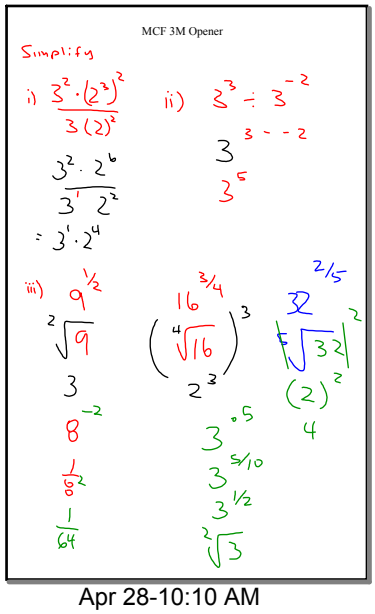

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Work Sheet
Transformations

$y = 2^x$

$D = \{x \in R\}$
$R = \{y \in R \mid y > 0\}$

Key Points to graphing

exponential growth
b/c + $b > 1$

horizontal asymptote
$y = 0$
y int = +1

$y = 2^x$	x	y
2^1	1	2
2		

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Work Sheet
Transformations

$f(x) = a(b)^{x-c} + d$

$y = (1/2)^x$

Key Points to graphing

$b =$

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Work Sheet
Transformations

$f(x) = a(b)^{x-c} + d$

$y = 3^x$

Key Points to graphing

$b = 3$

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Work Sheet
Transformations

$f(x) = a(b)^{x-c} + d$

$y = (1/2)^x$

$y = 2^x$

$f(x) = 2^x$

Key Points to graphing

$b = \frac{1}{2}$ (0.5)

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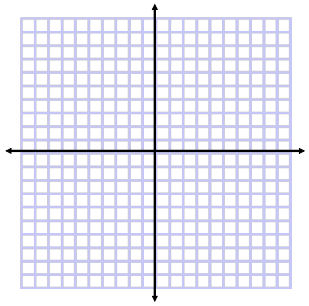
Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = 3^x$



Key Points to graphing

$b = 3$

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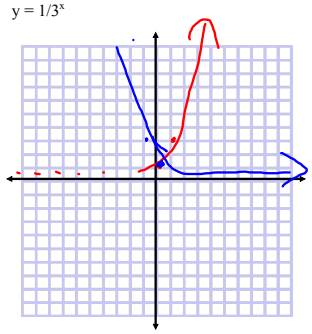
Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = 1/3^x$



Key Points to graphing

$b = \frac{1}{3}$

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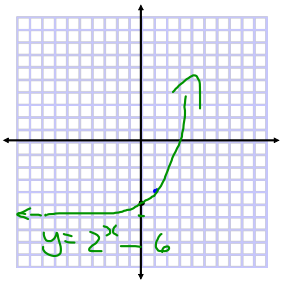
Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = 2^x - 6$



Key Points to graphing

exp $b > 1$

translate 6 units down

horizontal asymptote $y = -6$

y-int $= -5$

x	y
1	-4

$y = 2^x - 6$

$y = 2^1 - 6$

$y = 2 - 6$

$y = -4$

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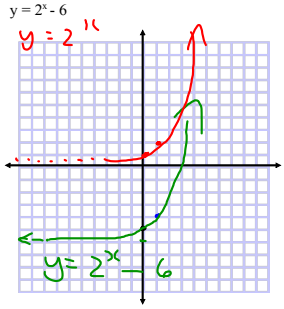
Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = 2^x - 6$



Key Points to graphing

exp $b > 1$

translate 6 units down

horizontal asymptote $y = -6$

y-int $= -5$

x	y
1	-4

$y = 2^x - 6$

$y = 2^1 - 6$

$y = 2 - 6$

$y = -4$

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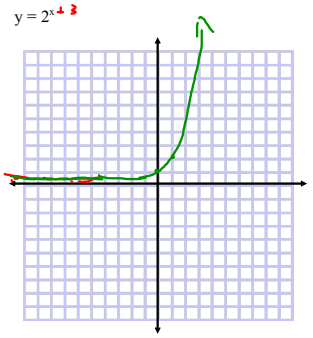
Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = 2^{x+3}$



Key Points to graphing

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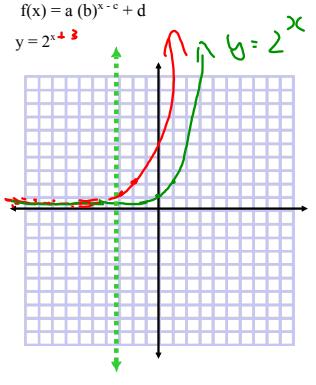
Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = 2^{x+3}$



Key Points to graphing

$c = -3$

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Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = -2^x$

Key Points to graphing

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Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = -2^x$

$y = (2)^x$

$f(x) = -2^x$

III IV

Key Points to graphing

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Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = (4)2^x$

Key Points to graphing

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Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = (4)2^x$

$y = 4(2)^x$

$f(x) = 2^x$

Key Points to graphing

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Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = (4)2^{(x-3)}$

Key Points to graphing

Apr 28-9:43 AM

Work Sheet
Transformations

$f(x) = a\,(b)^{x-c} + d$

$y = 2^x$

$y = (4)2^{(x-3)}$

$f(x) = 4\ 2^{(x-3)}$

$f(x) = 2^x$

Key Points to graphing

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Work Sheet
Transformations

$f(x) = a(b)^{x-c} + d$

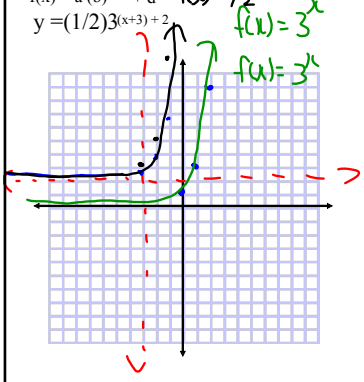
$y = (1/2)3^{(x+3)} + 2$

$f(x) = \frac{1}{2}3^{(x+3)} + 2$

$f(x) = 3^x$

$f(x) = 3^x$

Key Points to graphing



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p. 423-424
q.2, 4 & 5

Dec 5-7:26 AM